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10/602,549	06/23/2003	Kenneth L. Levy	P0837	2418

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EXAMINER	
NUNEZ, JORDANY	
ART UNIT	PAPER NUMBER
2179	

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11/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/602,549	LEVY, KENNETH L.	
	Examiner	Art Unit	
	Jordany Núñez	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08/29/2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16,23,25,27-30,33 and 35-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16,23,25,27-30,33 and 35-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/29/2007 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-16, 23, 25, 27-30, 33, 35-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Schuman et al. (US6950532, hereinafter Schuman).

As to claim 1, Schuman shows:

A method of embedding identification data in video, the video comprising a plurality of video frames (figure 8), said method comprising:

embedding (e.g., writing effects and security info onto content media) the identification data (e.g., "[d]isruption content may have a multitude of new content") in a first video frame prior to distribution or projection of the video (column 7, lines 42-53) (e.g., "this information [...] may be carried in the digital film itself" and "the disruption may be pre-authored"), the embedded identification data being visually perceptible upon examination of the first frame (figure 8, column 6, lines 24-34);

selecting a second video frame (e.g., "generated images" means that more than one image is generated, and images can be "image frames"), wherein the first and second video frames are separate frames (column 6, lines 24-34);

and embedding the identification data in the second video frame prior to distribution or projection of the content (column 7, lines 42-52), the embedded identification data being visually perceptible upon examination of the second frame, wherein the identification data is generally imperceptible upon real-time rendering of the video (e.g., "human eye many not detect them") (figure 8, column 6, lines 24-34).

As to claim 2, Schuman shows:

The method of claim 1, wherein the selecting comprising selecting the second frame so that the repetition of the embedded identification data is imperceptible to the human conscious mind when rendered (e.g., "human eye many not detect them") (column 6, lines 24-34).

As to claim 3, Schuman shows:

The method of claim 1, wherein the identification data is embedded in the same frame location in each of the first and second frames (e.g., if a human is to perceive a message, the message has to be in substantially the same location from one frame to the next) (column 6, lines 58-67).

As to claim 4, Schuman shows:

A detection method for the video embedded according to claim 1, comprising visually inspecting the first or second frames (e.g., "generated images may be captured [...] creating anomalous images") (figure 8, column 6, lines 32-43).

As to claim 5, Schuman shows:

A detection method for the video embedded according to claim 1, comprising providing device-aided character recognition of the first or second frames to detect the identification data frames (e.g., humanly perceiving the message) (column 6, lines 58-67).

As to claim 6, Schuman shows:

The method of claim 1 wherein the identification data is embedded in each of the first and second frames in the form of a digital watermark, yet the embedded digital watermarks remain visually perceptible upon examination of the first frame and second frame (column 6, lines 57-63).

As to claim 7, Schuman shows:

The method of claim 6, wherein the watermark visibility is due at least in part to watermark signal strength or intensity (column 6, lines 28-36 and lines 57-63).

As to claim 8, Schuman shows:

The method of claim 2, wherein the second frame is selected so that the repetition of the embedded identification data is imperceptible to the unconscious human mind (e.g., "human eye many not detect them") (column 6, lines 24-34).

As to claim 9, Schuman shows:

The method of claim 1, wherein the identification data comprise at least one of text, numbers, codes, images or graphics (column 6, lines 58-63).

As to claim 10, Schuman shows:

The method of claim 3, wherein the same location comprises a window (e.g., image frames) (column 6, lines 24-34).

As to claim 11, Schuman shows:

The method of claim 1, wherein the identification data comprise a plurality of identifiers (column 6, lines 58-63).

As to claim 12, Schuman shows:

The method of claim 11, wherein each of the plurality of identifiers (e.g., text or logos) is embedded to be spatially located in a separate frame location (e.g., "mark the content with messages") with respect to each other (column 6, lines 58-67).

As to claim 13, Schuman shows:

The method of claim 12, wherein the separate frame locations are the same for each of the first frame and second frames (e.g., if a human is to perceive a message, the message has to be in substantially the same location from one frame to the next) (column 6, lines 58-67).

As to claim 14, Schuman shows:

The method of claim 11, wherein the plurality of identifiers comprise at least two identifications (e.g., advertisement) selected from a group comprising: a content identification (e.g., text [...] identifying content), a distributor identification (e.g., logo), copy restriction information (e.g., "copy protected"), and an exhibition identification (e.g., "time of the event") (column 6, line 58 to column 7, line 4).

As to claim 15, Schuman shows:

The method of claim 1, wherein the identification data comprises at least one identification selected from a group of identifications comprising: content identification, a distributor identification, copy restriction information, and an exhibition identification (column 6, lines 58-67).

As to claim 16, Schuman shows:

A detection method for the video embedded according to claim 1, comprising averaging a plurality of the video frames including the first and second frames, wherein the averaging improves the signal to noise ratio of the identification data to video content (e.g., disruption content is inserted so that it " becomes visible when played [...] due to temporal expansion" when reconstructed, thus "improve[ing] the signal to noise ratio of the identification data") (column 6, lines 33-43).

As to claim 23, Schuman shows:

A method of marking content with auxiliary data, the method characterized in that the auxiliary data is embedded prior to distribution or projection of the video (column 7, lines 42-52) to be humanly perceptible if examined in a finite segment or frame of the content (e.g., generated images may contain disruption content), but is embedded so as to be humanly imperceptible when examined as the content is rendered in real-time (e.g., "human eye many not detect them") (figure 8, column 6, lines 24-34).

As to claims 25, 38 Schuman shows:

wherein the content comprises video (figure 8, "content media").

As to claim 27, Schuman shows:

A method of steganographically hiding data (e.g., watermarks) in media content (column 3, lines 42-49), wherein the media content comprises a plurality of segments including masking content (e.g., generated images) (column 3, lines 20-22), said method being characterized in that

at least two of the media segments are provided with the data (e.g., generated images) (column 3, lines 20-22) prior to distribution or projection of the video (column 7, lines 42-52),

wherein the data comprises humanly perceptible data (e.g., "inserting a human perceivable image") (column 3, lines 42-49), and

wherein the data remains perceptible upon individual examination of the at least two media segments but consciously imperceptible as the media content is rendered in real time since the data is below a perceptual threshold due to the masking content (column 6, lines 32-40).

As to claim 28, Schuman shows:

The method of claim 27 wherein the media content comprises video (e.g., generated images) (column 3, lines 20-22), the plurality of segments comprises video frames (e.g., image frames) (column 6,

lines 24-34) and the masking content comprises video frames (e.g., "spaced marks [...] spaced so as to coincide") without the data (column 6, lines 16-24).

As to claim 29, Schuman shows:

The method of claim 28, wherein the data comprises an image of at least one of a hexadecimal number, binary number or decimal number (e.g., date) (column 6, lines 58-67)..

As to claim 30, Schuman shows:

The method of claim 28, wherein the data comprises an image of text (column 6, lines 58-67).

As to claim 33, Schuman shows:

A detector to detect the data provided according to claim 28, wherein the detector averages a plurality of the video frames so that the provided data becomes consciously perceptible (column 3, lines 43-49).

As to claims 35, 39, Schuman shows:

The method of claim 27 wherein the auxiliary data comprises an identifier comprising I's and 0' s, where the I's are embedded in the content through modification to content data (column 7, lines 42-52) (inherent, since a digital film is comprised of zeros and ones).

As to claim 36, Schuman shows:

The method of claim 35 wherein the O's are represented in the content through the absence of modification to content data (column 7, lines 42-52) (inherent, since a digital film is comprised of zeros and ones).

As to claim 37, Schuman shows:

A method of marking content with auxiliary data comprising:

obtaining content;

embedding auxiliary data in the content through modifications of portions of the content, the modifications occurring prior to distribution or projection of the content, the modifications being humanly perceptible if examined in a finite segment or frame of the content, but provided in the content so as to be humanly imperceptible when examined as the content is rendered or projected in real-time; and

distributing or projecting the content (column 7, lines 42-52) (the film is made, the disruption content is pre-authored into the digital film, and then it is distributed).

As to claim 40, Schuman shows:

A detecting method comprising:

obtaining content,

the content including auxiliary data embedded therein,

the embedding being accomplished through modifications of portions of the content,

the modifications occurring prior to obtaining the content (the film is made, the disruption content is pre-authored into the digital film, and then it is distributed),

the modifications being humanly perceptible if examined in a finite segment or frame of the content, but provided in the content so as to be humanly imperceptible when examined as the content is rendered or projected in real-time (e.g., "human eye many not detect them");

averaging a plurality of content portions; and

detecting the auxiliary data from data representing averaged content portions, the auxiliary data being relatively more detectable from the data representing averaged content portions compared to individual portions including the auxiliary data (e.g., disruption content is inserted so that it " becomes visible when played [...] due to temporal expansion" when reconstructed, thus "improving the signal to noise ratio of the identification data") (column 6, lines 24-34; column 6, lines 33-43; column 7, lines 42-52).

References to specific columns, figures or lines should not be limiting in any way. The entire reference provides disclosure related to the claimed invention.

Response to Arguments

Applicant's arguments have been fully considered but are not persuasive. Examiner reiterates that references to specific columns, figures or lines should not be limiting in any way. The entire reference provides disclosure related to the claimed invention. Applicant argues that:

1) Claim 40 recites averaging a plurality of content portions, and detecting auxiliary data from data representing averaged content portions. The auxiliary data is relatively more detectable from the data representing averaged content portions compared to individual portions including the auxiliary data. The Office Action cited Col. 6, lines 24-34, Col. 6, lines 33-43 and Col. 7, lines 42-52 as meeting these features. We respectfully disagree. While these passages discussing timing of imaging devices, temporal expansion and disruption directives, there is no discussion regarding detecting auxiliary data from data representing averaged content portions. Claim 40 should be allowed (page 9, middle of page).

Examiner disagrees.

Col. 6, lines 16-24 discusses "inserting spaced marks into a generated image so as to coincide with the spacing of the image elements on image sensing devices optical sensors." In other words, spacing, or averaging, said marks (i.e., identification content) such that it coincides with the shutter or other optical sensor timing of a video recording device as it records. Col. 6, lines 33-43 further discusses that if the "generated images are of a reduced intensity, the human eye may not detect them [...] However, because of the timing of the imaging device, the generated images may be captured for much longer periods of time." In other words, the generated images (including the marks) need to be spaced, or averaged, such that the human eye may not detect them, but a video recording device does. Therefore, these statements clearly show detecting auxiliary data from data representing averaged content portions.

2) Claim 16 recites a detection method for the video embedded according to claim 1. The detection method includes averaging a plurality of the video frames including the first and second frames,

the averaging improves the signal to noise ratio of the identification data to video content. The cited Col. 6, lines 33-43 discusses timing of an imaging device and temporal expansion facilitated by timing differences between an IRD (e.g., a camcorder) and a IGD (e.g., film projector). These statements do not discuss or suggest averaging frames to improve signal to noise ratio of the identification data to video content. Claim 16 should be allowed (page 9, lower portion of page).

Examiner disagrees.

Examiner interprets the limitation "averaging improves the signal to noise ratio of the identification data to video content" to mean that the identification data embedded in the video content is spaced, or averaged, such that when a video recording device records a video content, the identification data is viewed more often, or put another way, the "signal to noise ratio of the identification data to video content" is improved. As specified above, Col. 6, lines 16-24 discusses "inserting spaced marks into a generated image so as to coincide with the spacing of the image elements on image sensing devices." In other words, spacing, or averaging, said marks (i.e., identification content) such that it coincides with the timing of a video recording device as it records. Col. 6, lines 33-43 further discusses that if the "generated images are of a reduced intensity, the human eye may not detect them [...] However, because of the timing of the imaging device, the generated images may be captured for much longer periods of time." In other words, the generated images (including the marks) need to be spaced, or averaged, such that the human eye may not detect them, but a video recording device does. Therefore, these statements clearly show averaging frames to improve signal to noise ratio of the identification data to video content.

3) Claim 33 recites a detector to detect the data provided according to claim 28. The detector averages a plurality of video frames so that provided data becomes consciously perceptible. The cited passage (Col. 3, lines 43-49) discusses selecting a pattern for inserting a watermark, which may involve a dynamic analysis of source content. This process is concerned with watermarking embedding, and not with watermark detection. Moreover, we see no discussion in the cited passage of averaging a plurality of video frames in the manner claimed. Claim 33 should be allowed (page 10, upper portion of page).

Examiner disagrees.

As stated by Applicant, Col. 3, lines 43-49 discusses inserting a watermark. Column 6, lines 57-63 discusses that a watermark may identify a location and time of the event being recorded. Furthermore, this passage discusses that said watermark might be part of the image content produced by the disclosed technique of inserting disruption content. Col. 6, lines 40-43 discusses that the disruption content may become visible, or detected, when played due to temporal expansion of the timing differences between an IRD (e.g., camcorder) and IGD (TV or projector). Thus, one of ordinary skill in the art would readily understand the disruption content, including watermarks, might become visible (i.e., becomes consciously perceptible) to identify a location and time of the even being recorded. Also, one of ordinary skill in the art would readily understand the recitation "timing differences" refers to the frames-per-second timing differences between the IRD and the IGD, and that the disruption content (e.g., watermark identifying location and time) becomes visible because the frames-per-second timing difference between the IRD and IGD favors displaying the disruption content, *on average* [emphasis added]. Thus, Schumann clearly teaches averaging a plurality of video frames so that provided data becomes consciously perceptible.

4) Claim 1 recites a method of embedding identification data in video. The method includes embedding the identification data in a first video frame prior to distribution or projection of the video, the embedded identification data being visually perceptible upon examination of the first frame; selecting a second video frame, wherein the first and second video frames are separate frames; and embedding the identification data in the second video frame prior to distribution or projection of the content, the embedded identification data being visually perceptible upon examination of the second frame, wherein the identification data is generally imperceptible upon real-time rendering of the video.

The cited Col. 7, lines 42-53, passage states that disruption directives may be carried in the actual digital film data itself. These "disruption directives" cooperate with the so-called "disruptor" to disrupt projection to introduce anomalies or modulation in the projected film. See. Col. 5, lines 11-14, Col. 8, lines 52-64 and Figs. 1-6. So these "disruption directives" control or influence the disrupter. (The disrupter control information may determine characteristics of the disruption such as the area or zone of the frame to be disrupted and which effect to produce in that zone.) The relied upon passage does not

embed the disruption directives in the first and second frames so as to be visually perceptible upon examination of the first frame and second frame, but generally imperceptible upon real- time rendering of the video. There is no mention of this at all. Indeed, these disruption directives (or control information) seem to be the information that controls the disrupter to insert anomalies or modulations during projection. The disruption directives are not the projected anomalies themselves. This is different from the combination recited in claim 1. We respectfully request that claim 1 be allowed (page 10, middle of page).

Examiner disagrees.

As Applicant points out, the disrupter control information may determine characteristics of the disruption such as the area or zone of the frame to be disrupted and which effect to produce in that zone. In other words, frames of a video are in effect embedded with disruption information by the disrupter, and this disruption information, as mentioned above, may include an event location and time data. From Col. 6, lines 16-24 which discusses "inserting spaced marks into a generated image so as to coincide with the spacing of the image elements on image sensing devices optical sensors," one of ordinary skill in the art can clearly infer that while said marks are readily perceptible to the human eye if one were to inspect the frames one at a time, it is because said marks on said generated images are *spaced* [emphasis added] in the manner described that they are not humanly perceptible while the video is rendered. Meanwhile, Col. 6, lines 40-43, clearly teaches that the spaced marks, or disruption content, may become visible when played after being recorded (e.g., by a camcorder). Column 16, lines 8-15 clearly discusses this. Thus, Schumann clearly teaches all the limitations of claim 1, except for the recitation "prior to distribution or projection of the content."

In regards to this, Examiner points out that embedding the identification data "*prior to distribution or projection of the content*" [emphasis added] seems more a design preference than a key aspect of the invention. Nonetheless, even if the embedding the identification data "*prior to distribution or projection of the content*" was a key aspect of the invention, Col. 17, lines 29-34, which discusses that one skilled in the art would recognize any image generation device (e.g., a DVD with embedded disruption content in its video frames and a DVD player) with the proper timing may be used to create images as disclosed, clearly teaches the limitation.

5) Claim 2 recites that the act of selecting comprises selecting the second frame so that the repetition of the embedded identification data is imperceptible to the human conscious mind when rendered. The cited Col. 6, lines 24-33 passage ("human eye may not detect them") relies on "reduced intensity" of generated images and not repetition of embedded identification data. Claim 2 should be allowed (page 11, middle of page).

Examiner disagrees.

Examiner points Applicant to Col. 6, lines 17-21. The "intensity" recited in the cited Col. 6, lines 24-33 passage refers to intensity of repetition. In other words, the bigger the spacing between generated images, which include marks, the lower the intensity of repetition of said marks, which in turn causes the human eye to not detect them while the video is rendered. By the same token, the smaller the spacing between generated images, the higher the intensity, and the more likely that the human eye may detect the marks embedded in the generated images.

6) Claim 3 recites that the identification data (of claim 1) is embedded in the same frame location in each of the first and second frames. The cited Col. 6, lines 58-67 passage does not discuss this feature. Rather, it discusses identifying information may indicate a location and time that an event was recorded. (The parenthetical on page 3 of the Office Action stating that if a human is to perceive a message, the message has to be in the same location from one frame to the next, may evidence a misunderstanding of claim 1. Claim 1 indicates that embedded data is preferably imperceptible when rendered in real-time. Claim 3 should be allowed (page 11, lower portion of page).

Examiner disagrees.

Examiner points out that the event location and time is visible, when, as explained by Col. 6, lines 40-43, for example, the disruption content is played after being recorded by an IRD (e.g., camcorder) due to the temporal expansion facilitated by timing differences (e.g., because the recording device records the frames with disruption content more often per second) between the IRD and IGD (e.g., display device). Event location and time would not necessarily be humanly perceptible, unless the intensity was such that

it would enable it, per Col. 6, lines 24-33. One of ordinary skill in the art would readily understand that in order for an IRD to temporally expand the disruption content such that a person can read an event location and time, said location and time would have to be embedded in different frames in substantially the same frame location. Also, Examiner points Applicant to Col. 17, lines 29-34.

7) Claim 5 clarifies that the character recognition is device-aided character recognition, e.g., OCR or other character recognition. This is unlike a human perceiving a message as stated in the Office Action at page 5, lines 1-3 (page 12, upper portion of page).

Examiner disagrees.

As pointed out above, the event location and time is visible, when, as explained by Col. 6, lines 40-43, for example, the disruption content is played after being recorded by an IRD (e.g., camcorder) due to the temporal expansion facilitated by timing differences (e.g., because the recording device records the frames with disruption content more often per second) between the IRD and IGD (e.g., display device). Event location and time would not necessarily be humanly perceptible, unless the intensity was such that it would enable it, per Col. 6, lines 24-33. In any of these two cases, a device aids (either the IRD or the IGD) in the character recognition.

9) Claim 12 recites that each of the plurality of identifiers is embedded to be spatially located in a separate frame location with respect to each other. We see no discussion of this combination in the cited Col. 6, lines 58-67 passage. And the parenthetical "mark the content with messages" is not helpful in showing "separate frame locations". Claim 12 should be allowed (page 12, middle portion of page).

Examiner disagrees.

As specified above, the content may be marked with messages, which depending on the intensity, may not be perceptible to the human eye except for when it is recorded (e.g., with a camcorder) and played back (e.g., low intensity), or may be readily perceptible to the human eye (e.g., high intensity). One of ordinary skill in the art would readily understand that a message, such as an advertisement

(column 7, lines 1-2), would sometimes involve "identifiers [being] embedded to be spatially located in a separate frame location with respect to each other."

10) Claim 23 recites - in combination with other features - a method of marking content with auxiliary data. The method is characterized in that the auxiliary data is embedded in the content prior to distribution or projection of the content so as to be humanly perceptible if examined in a finite segment or frame of the content, but is embedded in the content so as to be humanly imperceptible when examined as the content is rendered or projected in real-time. The Office Action cites to the Schuman patent at Col. 7, lines 42-53. As discussed above with respect to claim 1, this passage discusses that so-called disruption directives (or disruptor control information) can be included in digital film. But there is no teaching in this passage as to whether the control information is perceptible if examined in a finite segment, but is imperceptible when examined as the content is rendered. The rejection on page 6 of the Office Action also seems to misinterpret the Schuman patent. For example, the Office Action cites to disruption directives (Col. 7, lines 42-52) but then says that a generated image may contain disruption content. Recall, however, that the disruption directives control the disruptor to introduce anomalies in projected content. The disruption directives are not the projected anomalies themselves. Claim 23 stands ready for allowance (page 12, lower portion of page).

Examiner disagrees.

Examiner points Applicant to Col. 17, lines 29-34. Also, see above to the response in reference to claim 1.

11) Claim 37 are also believed allowable over the Schuman patent. For example, claim 37 recites, in combination with other features, an act of embedding auxiliary data in the content through modifications of portions of the content. The modifications occur prior to distribution or projection of the content. Moreover the modifications are humanly perceptible if examined in a finite segment or frame of the content, but are provided in the content so as to be humanly imperceptible when examined as the content is rendered or projected in real-time. As discussed above, disruption directives (Col. 7, lines 42-

52) control a disruptor to introduce anomalies in projected content. The disruption directives are not the projected anomalies themselves. Claim 37 should be allowed as well (page 13, middle portion of page).

Examiner disagrees.

Examiner points Applicant to Col. 17, lines 29-34. Also, see above to the response in reference to claim 1.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Van Wie et al.	[U.S. 6,449,367]
Shimizu	[U.S. 6,370,272]
Rhoads	[U.S. 5,636,292]
Ashizaki et al.	[U.S. 6,829,430]
Vynne et al.	[U.S. 5,960,081]
Rhoads	[U.S. 5,841,978]

THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jordany Núñez whose telephone number is (571)272-2753. The examiner can normally be reached on Monday Through Thursday 9am-7:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571)272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JN
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